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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,324	12/15/2003	Rick A. Lawson	068341.0109	3731

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EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT	PAPER NUMBER
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2612

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/736,324

Applicant(s)

LAWSON ET AL.

Examiner

Julie Lieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/24/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 19-21, 23-35 and 38-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 19-21, 23-35 and 38-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to Applicant's request for reconsideration filed October 24, 2006. No claims have been amended, added, or canceled.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1-10, 19-21, 23, 25-35, and 38-42 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Rein et al (US Patent No. 5,385,297) in view of Benda (US Patent No. 5,798,945).

Claims 1 and 26:

Rein et al. (hereinafter as Rein) discloses a system for acquiring and transmitting data between two or more positions or locations relative to a detected condition, the system comprising:

- a. at least one detector 58 (that is, zone sensor 58 including temperature sensor 64; (third detector) to detect a condition (temperature) mounted at a first location, the condition or event
- b. a battery powered RF transmitter 65 mounted at the first location in electrical communication with the detector 58, the transmitter having transmittable ID code and

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wirelessly transmitting signals relative to the ID code, the detector, and the battery to a location remote from the first location (see col. 9, 2nd paragraph and last paragraph);

c. a central processing 66 location remote from the first location for receiving and processing signals from the transmitter;

Rein fails to disclose at least two detectors, two transmitters, a second battery, and a third transmitter. However, it would have been obvious to one skilled in the art to add more detectors in the system of Rein to detect more conditions in air as those taught in Benda such as humidity or CO₂, etc... because they would be accounted for the environment of the building and could greatly affect a person's comfort and health, and as a consequence, the use of several transmitter and battery for these transmitters would be obvious.

The locations disclosed in Rein are within a building and it is not clear whether is a plant. However, it would have been obvious to one skilled to use the system disclosed in Rein in a plant as desired because it would be desirable to control the temperature in a plant to provide comfort and warrant the health safety to workers as it is in a building.

Claim 2:

Though not discussed in Rein, it would have been obvious to one skilled in the art to add more detectors, such as a fourth, fifth, sixth....or as many as desired in the combined system of Rein and Benda to detect more conditions. This is only a matter of choice in design and it is only up to the system implementer's discretion as to what conditions to be detected.

Claim 3:

The system in Rein further comprises at least one transmitter in communication with the at least one more detector and/or sensor.

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Claim 4:

The battery-powered transmitter in Rein is a spread spectrum transmitter. Col. 9, 2nd paragraph.

Claims 5 and 6:

Rein fails to specify that the one battery-powered radio frequency transmitter is a 900 megahertz spread spectrum transmitter. Nevertheless, the use of 900 MHz transmitter is conventional the art. Thus, it would have been obvious to one skilled in the art by the time the invention was made to have readily recognized using spread spectrum transmitters in the system Rein because it would minimize interference and increase reception quality.

The transmitter in Rein transmits on a predetermined time intervals. Col. 8, last paragraph.

Claims 7 and 8:

At least the one other transmitter in Rein comprises a spread spectrum RF transmitter.

Claims 9 and 10:

Rein fails to specify that the one battery-powered radio frequency transmitter is a 900 megahertz spread spectrum transmitter. Nevertheless, the use of 900 MHz transmitter is conventional the art. Thus, it would have been obvious to one skilled in the art by the time the invention was made to have readily recognized using spread spectrum transmitters in the system Rein because it would minimize interference and increase reception quality.

Claims 25, 27, and 29:

A detector in the combined system of Rein and Benda detects fugitive emission (CO₂).

Claim 32:

The at least one detector 58 in Rein is operable when a voltage from the battery is applied thereto, and the at least one battery powered radio frequency transmitter is a RF transmitter, the transmitter transmits signal on a predetermined time intervals, and transmits, when appropriate a low battery transmission signal. Rein fails to specify that the one battery-powered radio frequency transmitter is a 900 megahertz spread spectrum transmitter. Nevertheless, the use of 900 MHz transmitter is conventional the art. Thus, it would have been obvious to one skilled in the art by the time the invention was made to have readily recognized using spread spectrum transmitters in the system Rein because it would minimize interference and increase reception quality.

Claims 33 and 43:

Rein discloses battery powered system for monitoring and/or detecting events and/or conditions in a building, the system comprising:

- a. an exhaustible power source comprising a battery 59, the battery supplying a voltage;
- b. a detector 58 (temperature detector) mounted at a first location in the building, detector 58 operable when voltage from the battery is applied thereto and monitoring and/or detecting an event and/or a condition in the plant relating to an enclosure and/or an enclosed material in the building;
- c. a first transmitter 65 mounted at the first location, the transmitter operable when voltage from the battery is applied thereto, the transmitter in electrical communication with the detector, the transmitter wirelessly transmitting signals relating to an event

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and/or condition monitored and/or detected by the detector from the first location in the building, and the transmitter wirelessly transmitting, when appropriate, a

low battery signal;

d. a second exhaustible power source comprising a battery, the battery supplying a voltage;

e. a second transmitter mounted at a second location in the building remote from the first location, said transmitter operable when a voltage is applied thereto by the second battery, the transmitter wirelessly transmitting signals relating to a monitored and/or detected event and/or condition in the building, and said transmitter wirelessly transmitting, when appropriate, a low battery signal; and

f. a central processing location 66 remote from the first and second plant locations for receiving the signals from said first and second transmitters.

The locations disclosed in Rein are within a building. However, it would have been obvious to one skilled to use the system disclosed in Rein in a plant as desired because it would be desirable to control the temperature in a plant to provide comfort to workers as it is in a building and/or to protect plant structure from being damage due to undesirable temperature.

Claim 36:

The monitored and/or detected event and/or condition disclosed in Rein relates to an enclosure, which is the building and/or room.

Claim 37:

The monitored and/or detected event and/or condition disclosed in Rein relates to an enclosed material which is the building and/or room.

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Claim 41:

The detectors in the combined system of Rein and Benda monitor and/or detect more than one event and/or condition.

Claims 19-23, 28, 30-31, 34, 35, and 38-41:

Rein fails to disclose detecting different conditions related to pressure, a valve, liquid levels, or a pipe. Nonetheless, a skilled artisan would have readily recognized modifying the system to use it in a building or plant to monitor different building/plant conditions and events at different locations to insure safety of the building's occupants such as that taught in Benda as discussed above.

Claim 42:

The detectors in the combined system of Rein and Benda monitors and/or detects emissions.

4. Claim 24 is gain rejected under 35 U.S.C. 103(a) as being unpatentable over Rein et al (US Patent No. 5,385,297) in view of Benda (US Patent No. 5,798,945) and further in view of Hamm et al. (US Patent No. 5,774,052).

Claim 24:

Neither Rein nor Benda discloses detecting a level. However, Hamm et al. teaches detecting a light level in a building to ensure the comfort of a person within the building. In light of this teaching, one skilled in the art would have readily recognized using a light level sensor in the system of Rein for the same purpose that it is used in Hamm et al..

Applicant's Arguments

5. The Applicant has presented the following arguments:

Argument 1:

The Applicants has argued that the combination of Rein et al. and Benda is improper and further stated "Rein appears to prefer (while bot[h] required as discussed below) to monitor and report air temperatures via a battery powered sensor and a wireless transmitter whereas Benda prefers to monitor and report building temperatures via a sensor powered with AC building power and report, not via a transmitter, but back over the building AC power wiring. These are two alternative methodologies working on completely different principles to monitor and report building temperature data. Combination would not seem to be proper and/or reasonable, i.e., one of ordinary skill in the art would use one or the other to monitor and report temperature data in a building, not modify one reference in some ways to mirror characteristics of the other reference that works on a different principle. (See MPEP §2143.02.) Indeed, Rein's "central receiver 66" would require modification to either receive and process Benda's AC wired data from Benda's AC powered non-temperature sensors and/or modified to communicate with and process Benda's non-temperature related data being received by and subsequently reported via Benda's "central logging unit 4" to Rein's 'central receiver 66.' One of ordinary skill in the art would choose a single receiving and processing system and choose the most efficient means to handle all types of data, i.e., use

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an existing system, not modify one to work with another central unit. Consequently, Rein and Benda are not properly combinable.”

Argument 2:

The Applicants has argued that the combination of Rein and Benda would not yield the claimed invention.

Argument 3:

The Applicants has argued that “claim 1 requires a first battery-powered temperature transmitter to transmit temperature data signals AND a second battery-powered transmitter to transmit emissions, power, or level data signals. As shown above, under either combination of the cited art references, AC power from building wiring is utilized to monitor and report non-temperature related data back to a central unit. In fact, following the most plausible and thus, proper combination of the teachings of Rein and Benda, an entirely AC powered system would result (1) as expressly envisioned by Rein at Col. 8, lines 43 - 45 (“[t]he power source 59 can also be a wired connection to an AC power source”), and (2) as expressly required by all Benda embodiments. Thus, the Examiner's prior art combination fails to teach a battery-powered transmission system wherein temperature AND at least one other parameter, e.g., pressure, level, and/or emissions are monitored and reported wirelessly, i.e., via battery-powered transmitters. Consequently, the Examiner has failed to establish a prima facie case of obviousness. Applicants request withdrawal of the rejection and favorable action with regard to Claims 1-10, 19 - 21, 23, and 25-32.”

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Argument 4:

The Applicants has demanded documentary evidence supporting that the use of 900 MHz transmitters in the Applicant's claimed system was conventional in the art.

Argument 5:

With regards to claim 33, the Applicants has submitted Claim 33 was previously amended to eliminate "the relates to an enclosure" language and now only specifically states "an enclosed material in the plant. Applicant as has stated that claim 33 is directed to "enclosed materials" not merely an enclosure, which the Examiner equates with a building or a room.

Argument 6:

With regards to claims 20, 23, 24, 30, 31, 34, 35, and 38-41, the Applicants has argued that the examiner failed to established a prima facie case of obviousness.

Argument 7:

Regarding claim 42, the Applicants have argued "Rein teaches nothing in regards to monitoring any data relating to an enclosed material or the monitoring or detection of emissions from an enclosure. Likewise, Benda fails to disclose anything in relation to monitoring an enclosed material. Benda's air sensors are AC powered and, like Rein, only

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monitor general air environment conditions, not an emission from an enclosure or an enclosed material as claimed.”

Response to Applicant's Arguments

6. Applicant's arguments filed October 24, 2006 have been fully considered but they are not persuasive.

Response to argument 1:

The examiner submits that Benda is used to show a teaching that different detectors are being used along with a temperature detector in a building environment to ensure safety is well known in the art and it would have been obvious to one skill in the art to apply this teaching in the Rein system because Benda's system would further enhance the comfort along with safety advantage. Benda is combined with Rein for such reason, thus, the combination is proper. How the Benda system transmits the signal is irrelevant, this feature is not used in the rejection against the Applicants' claimed invention.

Response to argument 2:

The combination of Rein and Benda would yield the claimed invention as stated in the rejection in light of the response to the Applicants argument 1 stated above.

Response to argument 3:

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As the examiner submitted in the response to argument 1, the wired configuration in Benda would not affect the wireless transmission in Rein because Benda is used for purpose of providing teaching of different detection in a building.

Response to Argument 4:

US Patent No. 5,299,264 is cited herein as demanded by Applicant.

Argument 5:

With regards to claim 33, Applicant has submitted Claim 33 was previously amended to eliminate "the relates to an enclosure" language and now only specifically states "an enclosed material in the plant. Applicant as has stated that claim 33 is directed to "enclosed materials" not merely an enclosure, which the Examiner equates with a building or a room.

Argument 6:

Regarding the Applicant's assertion that the Examiner has failed to establish a prima facie case of obviousness to 20, 23, 24, 30, 31, 34, 35, and 38-41, it is submitted that "[A] prima facie case of obviousness is established when the teachings of the prior art would appear to have suggested the claimed subject matter to person of ordinary skill in the art. The combined teachings of the prior art need not to provide an absolute prediction of success for the claimed subject matter. Instead on a reasonable likely hood of success is required." (In re Ball Corporation, 18 USPQ 2d 1491).

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In this case, one of ordinary in the art would have readily recognized that there are many devices included in a building to be controlled and monitored to ensure comfort and safety to occupants within the building, and it is only a matter of design choice as to what is to be monitored and controlled so as to accomplished the objective of the use of the system.

Argument 7:

It should be noted that the combined system of Rein and Benda detects CO₂, thus, it includes detection emission from an enclosure as claimed.

For the reasons stated above, the Applicants' arguments are not deemed persuasive, thus, the rejection is maintained.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schotz et al., US Patent No. 5,299,264.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

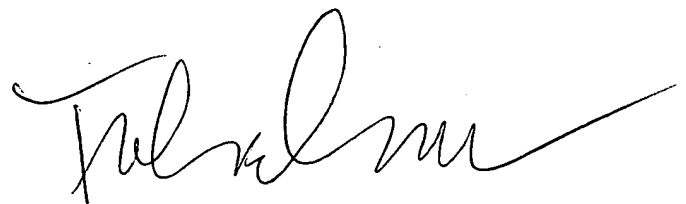
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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long, sweeping horizontal line extending to the right.

Julie Lieu
Primary Examiner
Art Unit 2612

Jan 08, 07